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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,221	11/07/2001	David J. Poelker	194-26699-US	9829
24923	7590	03/15/2004	EXAMINER TUCKER, PHILIP C	
PAUL S MADAN MADAN, MOSSMAN & SRIRAM, PC 2603 AUGUSTA, SUITE 700 HOUSTON, TX 77057-1130			ART UNIT 1712	PAPER NUMBER

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/045,221	<b>Applicant(s)</b> POELKER ET AL.	
	<b>Examiner</b> Philip C Tucker	<b>Art Unit</b> 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 11-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1712

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7-10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Randen (5652296).

Randen teaches the forming of acidic gels of polymers which comprise the monomers of the present invention, within the scope of the ratios herein (column 7, lines 19-31 and claim 1). The method of making would form polymers within the scope of the molecular weight of the present invention.

3. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 2912326.

DE '326 exemplifies a copolymer of acrylamide at 75% and dimethylaminoethyl methacrylate at 25% (page 17), and wherein the molecular weights of the polymers may be as high as 10 million (see claim 12).

4. Claims 1, 2, 4-6 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 06-80737.

JP '737 teaches a copolymer of acrylamide and dimethylaminoethyl methacrylate which can be formed from the polymers in the presence of a crosslinking agent, and exemplifies a molecular weight of 1.7 million (see the attached abstract).

5. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Dexter (3839500).

Dexter teaches a copolymer of acrylamide and dimethylaminoethyl methacrylate in a ratio of 80:20, which has a molecular weight of about 4.5 million (see compound at bottom of Table II, examples 2 and 4 and column 3, lines 61-63). Molecular weights as high as 13 million may be formed (see column 2, lines 61-62).

6. Claims 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 04-11095.

JP '095 teaches a composition which comprises acrylamide, dimethylaminoethyl methacrylate and bisacrylamide, wherein the bisacrylamide may be present in levels as

Art Unit: 1712

low as 0.01%, which is equivalent to 100 ppm (see attached abstract). Such level of 0.01% would anticipate the “less than about 100 ppm” of claim 19.

7. Claims 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Oguni et al (5698627).

Oguni teaches a composition which can comprise acrylamide, and other comonomers such as acrylic acid, dimethylaminoethyl methacrylate and dimethylaminopropyl acrylamide, along with a bisacrylamide crosslinking agent (see definitions of column 8, lines 25-52, Tables I and II A\_G and I-R). Column 5, lines 3-5 teaches that the crosslinker (d) may be present in as low as 0.005 mol%, which is 50 parts per million.

8. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by EP 311904.

EP '904 teaches a composition of acrylic acid and dimethylaminoethyl methacrylate (page 4, 5<sup>th</sup> compound in table), wherein such may be crosslinked with upto a maximum of 25 crosslinkers (see attached abstract).

9. Claims 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1712

10. Applicants arguments and amendment have been considered but are only deemed partially persuasive. Applicants cancellation of claim 14, removes Borchardt and Kaussen as rejecting subject matter. Applicants amendment to claim 1, distinguishes over Gleason which does not teach R2 as O. Applicants arguments with respect to Furuno using a chain transfer agent to control the growth of the polymer are deemed persuasive, since such polymer would not be expected to achieve weights as high as 1 million. Applicants arguments with respect to Randen is not deemed persuasive. The time and conditions of polymerization used in forming the copolymer of Randen should lead to polymers within the range of the 1 – 10 million molecular weight range of the present invention. Here are no chain transfer agents or other hindering mechanism which would terminate the reaction prior to such weights being achieved. Applicants attempt to distinguish by stating that the composition is a gelled acid instead of an acidic gel, is not seen as distinguishing, since this would imply that only a pure acid is gelled by the polymer, which is absent from applicants teachings. New rejections are presented.

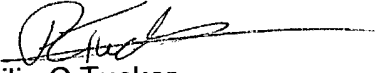
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone

Art Unit: 1712

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Philip C Tucker  
Primary Examiner  
Art Unit 1712

PCT\_2960